a rotor freely rotatably mounted in said casing for free rotation about an axis of rotation.

- 25. Apparatus as recited in claim 24, wherein said inlet is provided with at least one throttling member which throttles the flow of fluid into said casing.
- 26. Apparatus as recited in claim 25, wherein said throttling member comprises at least one rib mounted in the vicinity of said inlet in said casing for causing the mass center of the flow-of-fluid entering-said casing to deviate from flow centered-on-said axis-of rotation.
- 27. Apparatus as recited in claim 25, wherein said throttling member comprises a valve mounted in the vicinity of said inlet for causing the mass center of the flow of fluid entering said casing to deviate from flow centered on said axis of rotation.
- 28. Apparatus as recited in claim 27, wherein said valve comprises part of said casing, or is attached to said inlet flange of said casing, or comprises part of said inlet piping.
- 29. Apparatus as recited in claim 24, further comprising at least one stationary mixing member disposed within said casing.
- 30. Apparatus as recited in claim 29, wherein said at least one stationary mixing member is mounted at least 90 degrees from said outlet opposite the direction of rotation of said rotor.
- 31. Apparatus as recited in claim 29, wherein said stationary mixing member comprises a rib attached to a wall of said casing.
- 32. Apparatus as recited in claim 24, wherein said outlet includes a diffuser-like outlet pipe which recovers dynamic pressure from the flow of mixed pulp.